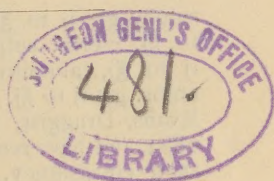


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THE

OINTMENT OF BOROGLYCERIDE

(UNGUENTUM BOROGLYCERIDI).

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THE following remarks, relative to the use of unguentum boroglyceridi in certain ocular diseases, are based on an extended experience of over one year, during which time many cases have been treated. The following is the formula for making the ointment:

R.—Boroglyceride, 50 per cent. solution in
glycerine, ℥ij.
Vaseline, 3vj.
Ol. rosæ, q. s.—M.

Heat the boroglyceride, and, while hot, add it slowly to the vaseline, stirring constantly until thoroughly mixed. To this formula may be added mydriatics, myotics, and the stronger astringents. I have in my possession samples of the ointment containing atropiæ sulph. gr. iv to ʒj, hyoscyamiæ

sulph. gr. ij to $\overline{3j}$, homatropiæ hydrobrom. gr. ij to $\overline{3j}$, eserin. sulph. gr. ij to $\overline{3j}$, cupri sulph. gr. ij to $\overline{3j}$, aluminis pulv. gr. vj to $\overline{3j}$, and zinci chlor. gr. ij to $\overline{3j}$. These samples were prepared by Evans, Druggist, 1104 Chestnut Street, August 1, 1883, and have remained pure and sweet, preserving their consistency, and the power of the suspended drugs unaltered.

The advantage claimed for the ointment over the boroglyceride in solution, in ocular therapeutics, is that it can be more easily applied to the eyes of children by the untrained hand; also, that we have a vehicle in which we can combine two drugs, one having a mydriatic (atropiæ sulph.) as well as an irritating effect on the conjunctiva, the other (boric oxide) astringent qualities. It is the experience of every ophthalmic surgeon that an aqueous solution containing a suspended drug, standing in a warm temperature for several days, soon becomes filled with a fungus. A careful ophthalmic surgeon would hesitate to apply such liquids to an ulcerated cornea, or even where there is conjunctivitis. The continued use of a solution of atropia will often excite an acute conjunctivitis and excessive dryness of the throat or erythema of the face, and in a very few cases marked atropia poisoning. By using the atropia suspended in the boroglyceride ointment, we escape these troubles. The boric oxide, being an astringent, counteracts the irritating properties of the atropia, the vaseline closing the mouths of the canaliculi, thereby preventing the atropia being carried through the lachrymal canal to the throat. The atropia is also, on account of the closure of the mouths of the canals, retained longer in the palpebral sacs, hence a more thorough dilatation of the pupil and paralysis of the ciliary

muscle are obtained with a lesser quantity of the drug.

In certain purulent diseases of the eye I prefer the boroglyceride in glycerine.¹ The following ocular troubles respond favorably to the action of the ointment when applied in a quantity about the size of a split-pea every three hours.

1. Ulcers of the cornea when arising from anæmia.
2. Phlyctenular ulcers both of cornea and conjunctiva.

3. Ulcer rodens due to infection, and ramolissement of the cornea due to pressure or exposure.

4. Marginal ulcers of the cornea found in strumous children; here the addition of eserine sulph. (gr. ij to ʒj) hastens the reparative process.

5. Trephined ulcers (central) in children, and ulcers of the cornea in old individuals, and corneal infiltration with pus.

6. *Not* in abrasions of the cornea after removal of foreign bodies, nor in recent wounds of the cornea or sclerotic, either with or without prolapse of the iris.

7. In astigmatic keratitis; accompanying this affection we have supra- and infra-orbital pain, and at times temporal reflex,² either of which is a diagnostic symptom. The addition of atropine sulph. (gr. iv to ʒj) renders the action of the ciliary muscle passive, which being the exciting factor, relief is at once experienced. The ametropia must be corrected, or the patient will have recurrent attacks.

8. In granular lids of young persons, complicated with pannus, the addition of atropine sulph. (gr. iv

¹ See THE MEDICAL NEWS, May 26, 1883.

² Ibid., March 8, 1884.

to $\bar{3}j$) or of cupri sulph. (gr. ij to $\bar{3}j$) is of the greatest value when we have the condition known as keratitis trachomatosa present.

9. In blepharitis marginalis, eczema of lids, and conjunctivitis; not, however, when there is excessive lachrymation present in the latter trouble. In these cases, the boroglyceride solution in glycerine (fifty per cent.) is preferable. The glycerine being hygroscopic has an affinity for water, the boric oxide being precipitated at once stimulates the diseased condition to healthy action, and relief soon becomes manifest.

In ophthalmia neonatorum, a fifty per cent. solution of boroglyceride in glycerine is applied every two hours (*ad. lib.*), and an ointment of boroglyceride applied to the margins of the eyelids at night.

When applying the boroglyceride in solution, care must be observed in separating the eyelids; this can be done with lid-retractors. In elevating the lids with the retractors, a pouch is made which can be filled with the solution.

An excellent and cheap retractor may be made of a hairpin; curve the looped end to a right angle with its tines. This instrument is safer than the lid-retractors usually found in the ophthalmic instrument case, and is always at hand.

When the corneæ become hazy or opaline in ophthalmia neonatorum, use the ointment containing eserine sulph. (gr. ij to $\bar{3}j$) every two hours; a piece the size of a split-pea is to be applied, in addition to the solution of boroglyceride. By following this mode of treatment, the most troublesome cases are cured in a very few days.

My friend, Dr. D. N. Dennis, who has had extended experience in the use of the drug in the treatment of ophthalmia neonatorum, has very

kindly placed at my disposal the clinical notes of one of his cases recently treated in private practice.

“On the the sixth day¹ after birth, a purulent discharge was first noticed; the eyelids were œdematous and swollen. The following treatment was at once instituted. The eyes were thoroughly cleansed with tepid water, and a thirty-five per cent. solution of boroglyceride in glycerine was dropped into each eye every two hours (enough to fill the conjunctival sac). The first noticeable change for the better was about thirty hours after the treatment was commenced. The œdema and swelling had greatly decreased, the pus had lessened in quantity, and the eyes looked in better condition generally. The treatment was continued. After its thorough use for three days, it was found that the purulent character of the pus had changed. The solution was then instilled into the eyes every four hours instead of every two; this was continued for several days, when the discharge of pus entirely stopped, and, with the exception of some redness of the conjunctiva, the eyes were in a healthy condition.”

As boroglyceride is a most valuable therapeutic agent in other fields of medicine, I have asked my friend Dr. Granville Faught, who has a large and varied field in which to make investigations, to contribute for the benefit of the general practitioner, especially those physicians living remote from the medical centres and inland, his experience with the drug in general practice.

Dr. Faught writes: “It is now nearly two years since Dr. Fox and I commenced the use of

¹ I may here state that if the pus makes its appearance the second or third day after birth in large quantity, the case will prove refractory, and is not responsive to mild remedies.

boroglyceride in the wards of the Germantown Hospital. Since resigning my position as resident physician in the above-named institution, I have continued its use not only in private practice, but also in the out-patient department of one of the largest charity dispensaries of this city, and it is on this extended experience we base our remarks. Boroglyceride is a non-crystalline, amber-colored, vitreous substance, insoluble in water and alcohol, but very soluble in glycerine. It is formed by heating sixty-two parts of boracic acid and ninety-two parts of glycerine until it ceases to lose weight, which will be when it has lost about one-third. It appears to be, strictly speaking, a saturated solution of boric oxide in glycerine. The addition of water decomposes it, forming boric acid. In therapeutic measures, it is found most convenient to use a fifty per cent. solution in glycerine, which is of the consistency of honey.

“Experience confirms it as an antiseptic astringent of great value in almost all catarrhal affections. It is a good surgical dressing after the acute inflammatory stage, and its application has been followed by good results in relaxed conditions of the throat, post-nasal catarrhs, and gleet discharges; its addition to poultices keeps them sweet and clean in hot weather, even over long periods. It is of the utmost value in gynecology, and supplies a long-felt want. In such cases it should always be applied upon a cotton or jute tampon and allowed to remain from twelve to twenty-four hours. I have seen them on several occasions remain in the vagina, by accident, nine days or longer, and when removed they were not foul. Lacerated cervixes, erosions, subinflammatory uterine disease, and leucorrhœa, all show great improvement from its use. I have frequently

seen a single tampon remove a long-standing leucorrhœa. For these applications we have also used solutions containing iodine (gr. xx-xxx to ℥j) and thymol (℥j to ℥j). In pruritus of the vulva or anus, it is the treatment we have used. A friend reports to me the case of a patient of his, whose suffering from genital pruritus was so great as to lead her friends to be anxious for her mental state, in which, after all other forms of treatment had failed, an application of boroglyceride brought instantaneous relief. The addition of quiniæ sulph. (℥j) to ung. boroglyceridi (℥j) is very efficacious in pruritus ani. We have several times given it internally, but have never seen any results which we thought were better than from the use of boracic acid."

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